Type Approved to STCW 95

Engine Room CBT

PC-Based Engineroom Simulators & CBT modules

Engine Room CBT is a unique simulator and multimedia training package, which extensively covers the subject of marine power plant equipment with 2D and 3D simulators. The package provides no fewer than 36 individual training modules. It has been type approved to STCW 95 and offers excellent value to marine engineering colleges & training centres.

Engine Room CBT consists of the following modules:

- Air Conditioning Plant 3D
- Auxiliary Steam Boiler Installation
- Biological Sewage Treatment Plant
- Controllable Pitch Propeller Installation
- Combined Oil Fired and Exhaust Gas Boiler
- Diesel Engine Generators
- Diesel Engines
- EcoStream
- Emergency Power Plant 3D
- Electric Power Plant
- Fixed Delivery Pump Steering Gear Installation
- Freshwater Generator
- Freshwater Generator 3D
- Freshwater Generator Aqua type
- Fuel Conditioning Module 3D
- Fuel Oil Treatment Plant
- Gas Turbine
- Hydrophore Installation
- Hydrophore Installation 3D
- Marine Compressors
- Marine Diesel Engine Monitoring Systems
- Marine Heat Exchangers
- Marine Hydraulic Machinery
- Marine Pumps
- Oily Water Separator
- Remote Control System for MAN B&W LMC engines
- Remote Control System for SULZER RTA Engines
- Refrigeration Plant
- Refrigeration Plant 3D
- Reverse Osmosis Desalination System
- Rotary Vane Steering Gear
- S-type Separation System
- Variable Delivery Pump Steering Gear
- Pureballast Treatment System
- PureBilge – Bilgewater cleaning system
- Fixed Fire Fighting system

The main educational tasks which can be accomplished by Engine Room CBT:

- familiarisation with the principles of operating auxiliary shipboard systems & equipment
- training in marine power plant operation
- training in emergency procedures
- preparation for competency assessment

Engine Room CBT's main features:

- Realistic presentation of marine power plant equipment, with control panels and system installation diagrams
- Accurate mathematical modelling of each type of plant to ensure that the simulator will react to the trainee's actions exactly as it would in real life
- Interactive training - control panels contain switches, pressure gauges, control and alarm lamps, and allow actions such as opening or shutting valves
- Sound and graphics ensure that the modules realistically portray the equipment and reflect the consequences of trainee actions
- Some modules can simulate faulty operation, something which would not be possible under real conditions

A typical module consists of four parts:

- System description
- Operating instructions
- Test
- Interactive simulator

System description
This describes the application, working principles and main components of the installation, together with different kinds of illustration (pictures, photos, diagrams etc). By clicking on the appropriate part of the installation diagram, the part name appears.

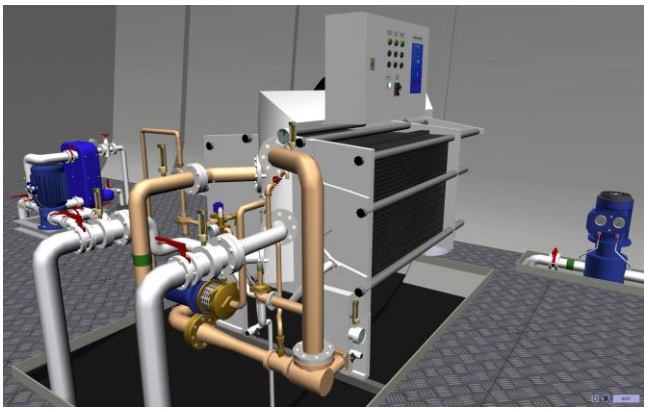
Operating instructions
This contains a step-by-step description of preparations for starting the plant, automatic and manual control functioning and stopping the plant, with graphics illustrating the consecutive phases of the plant operation.

Test
The test is intended to assess the knowledge gained by the trainee from the two first parts of the module. The trainee must give the correct answer to randomly selected questions. This enables the trainee to carry out the test more than once without having to answer the same questions. At the end of each test the trainee is given a score.

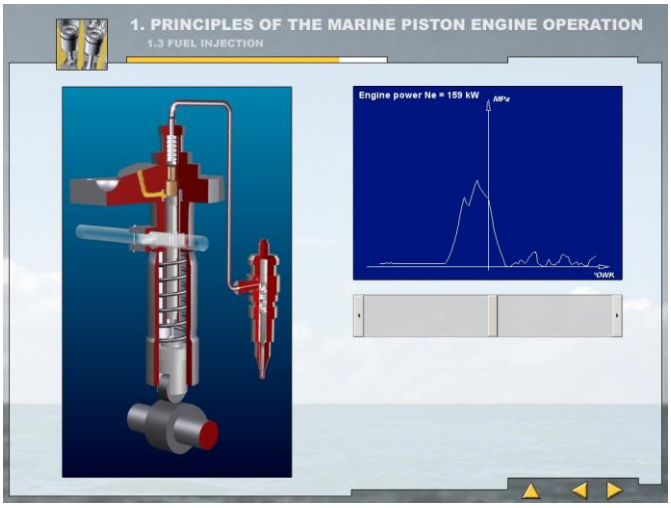
Simulator
Finally, the trainee must set the valves on the installation diagram to their proper positions and start the pump, the compressors etc. by operating the switches and buttons on the panel. This enables the trainee to put into practice the theoretical knowledge he has gained.

The following pages contain screen shots of some of the modules in Engine Room CBT.

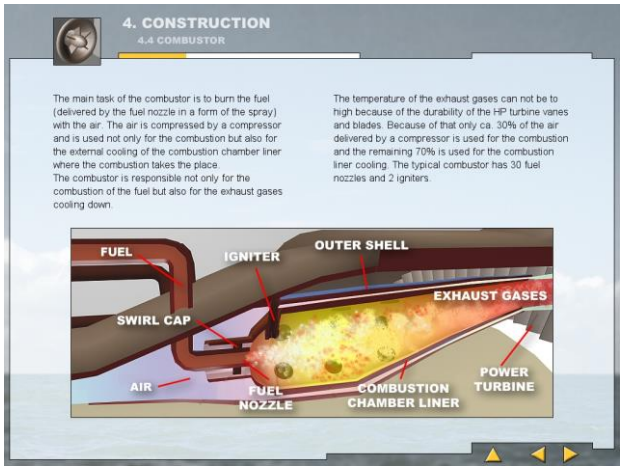
AQUA FRESHWATER GENERATOR



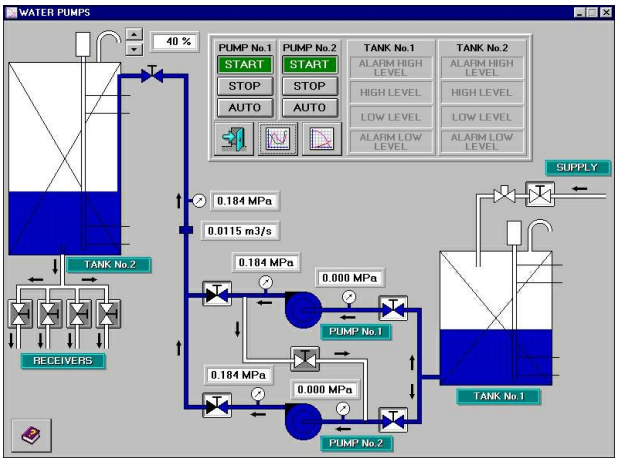
DIESEL ENGINES



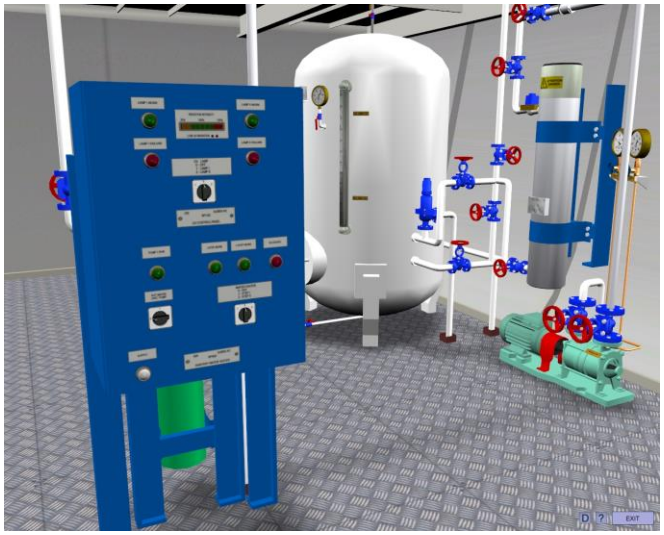
GAS TURBINE



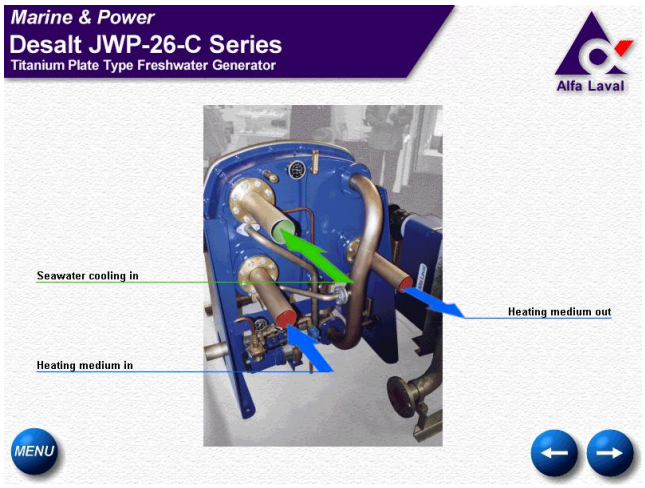
MARINE PUMPS



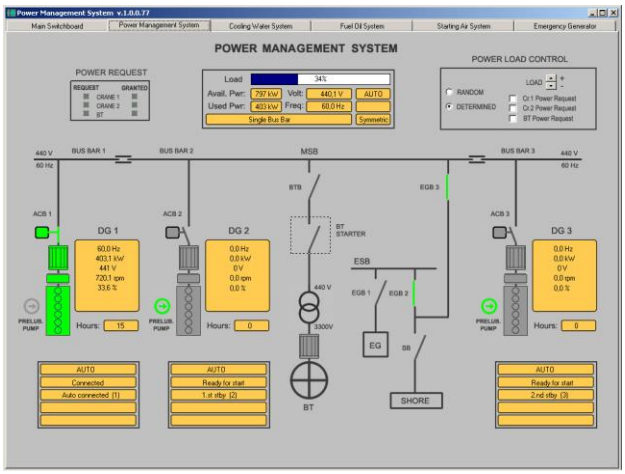
HYDROPHORE SIMULATION



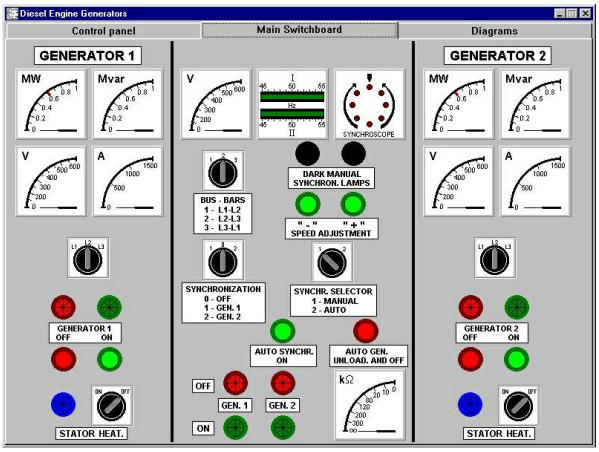
FRESHWATER GENERATOR



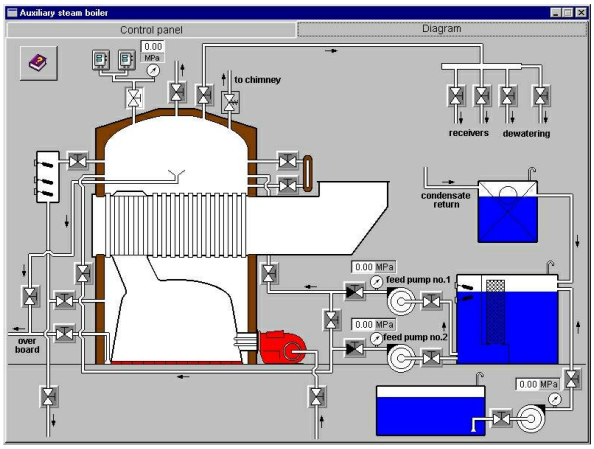
ELECTRIC POWER PLANT



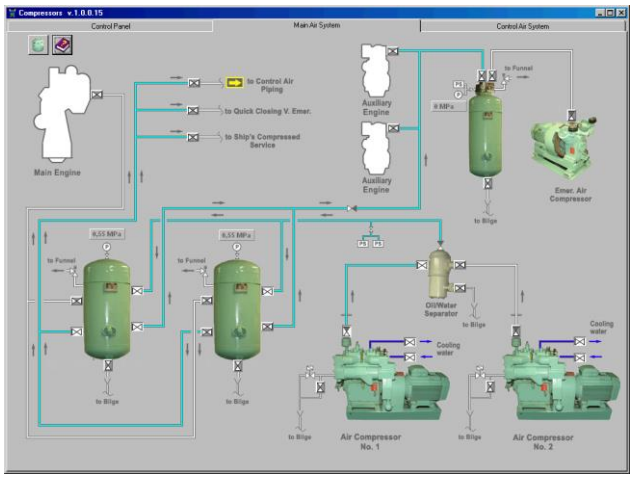
DIESEL ENGINE GENERATORS



AUXILIARY STEAM BOILER

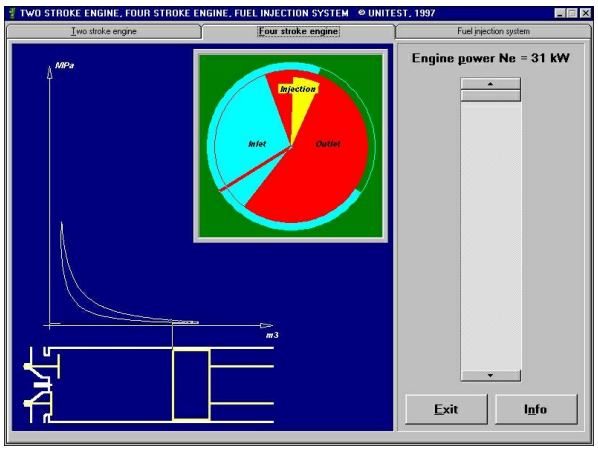


MARINE COMPRESSORS

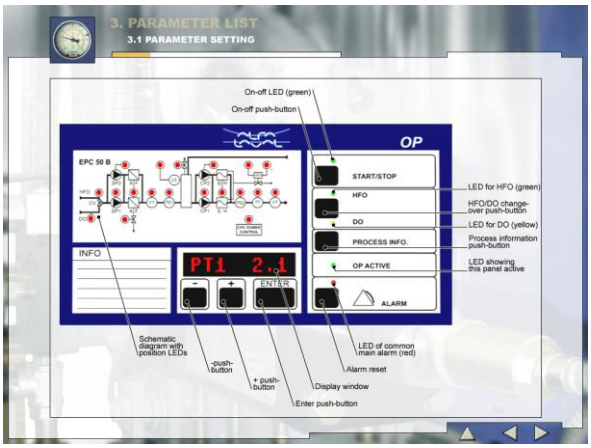


EMERGENCY POWER PLANT

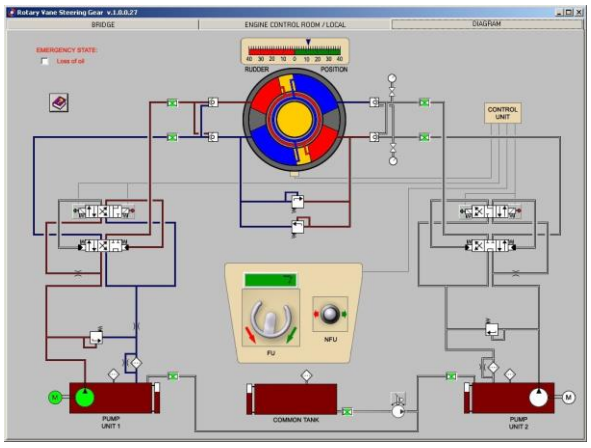
FOUR-STROKE DIESEL ENGINE



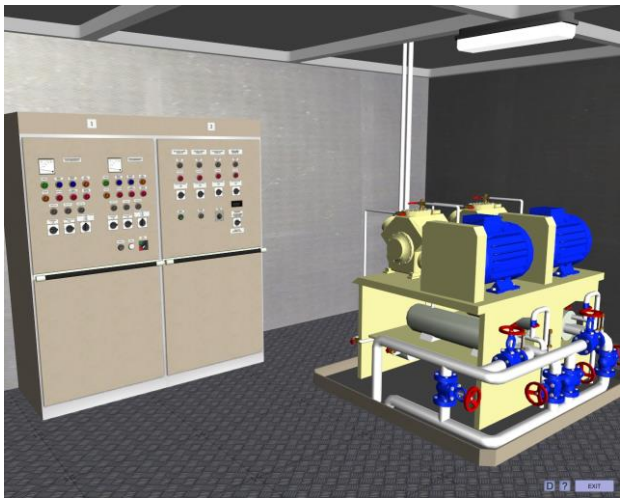
FUEL CONDITIONING



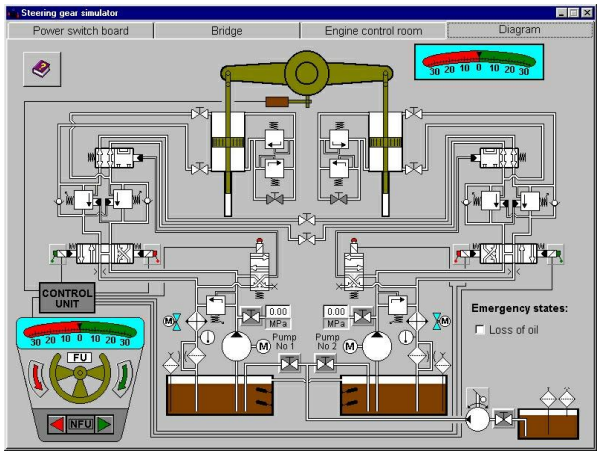
ROTARY VANE STEERING GEAR



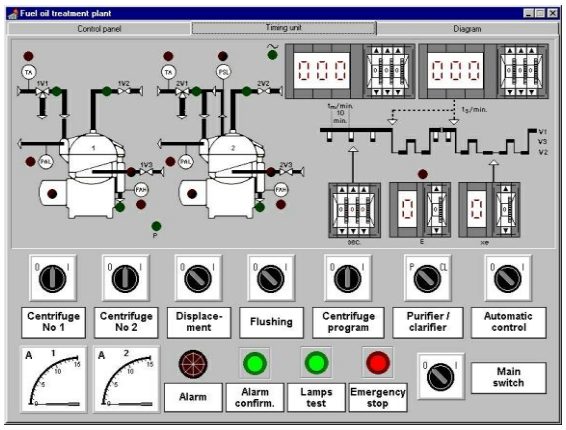
REFRIGERATION PLANT



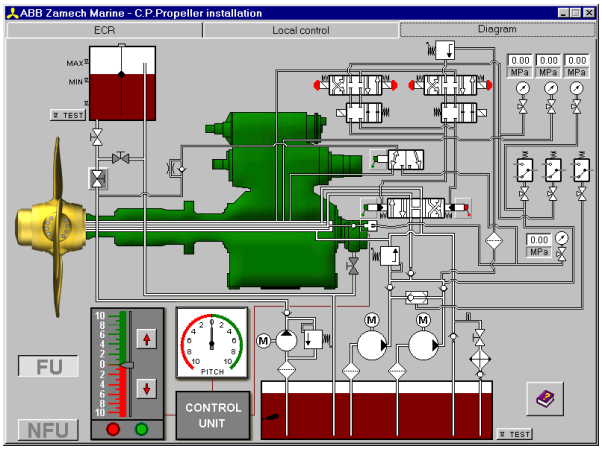
STEERING GEAR



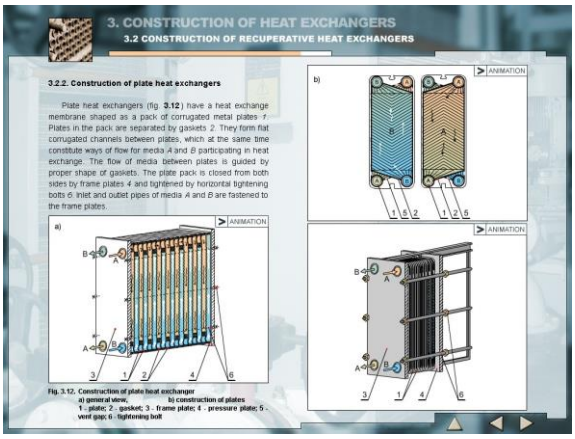
FUEL OIL TREATMENT PLANT



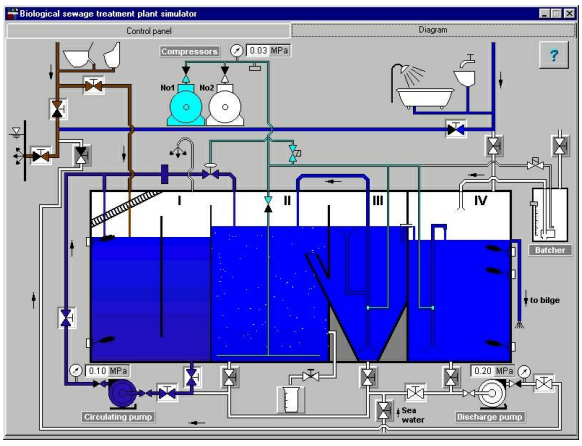
CONTROLLABLE PITCH PROPELLER



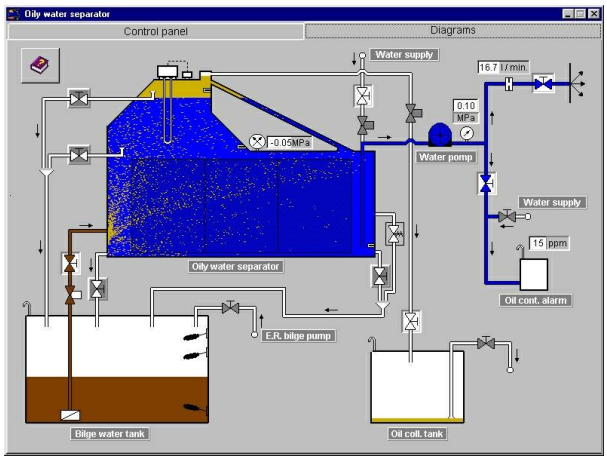
MARINE HEAT EXCHANGERS



BIOLOGICAL SEWAGE TREATMENT PLANT



OILY WATER SEPARATOR



Please contact us if you would like further details about Engine Room CBT.